

**BUILDING 10 AREA SITE-SPECIFIC ADDENDUM TO THE
PRESIDIO TRUST LAND USE CONTROL MASTER REFERENCE
REPORT**

PRESIDIO OF SAN FRANCISCO, CALIFORNIA

Prepared for:

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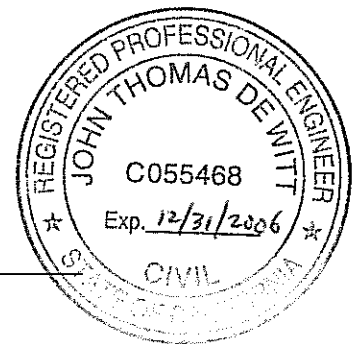
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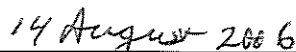
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August 2006



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Date

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Presidio of San Francisco, California

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Figure 1: Building 10 Land Use Control Area

Table 1: Building 10 Land Use Controls

1. INTRODUCTION

The California Environmental Protection Agency, Department of Toxic Substances Control (“DTSC”) requires sites that do not fully meet the most stringent Presidio-specific human health cleanup levels (i.e., residential cleanup levels), or if residual chemicals are left in place such that a cover is required, to have land use controls to inform and protect future users. This Site-Specific Addendum has been prepared for the Building 10 Area as an addendum to the Presidio Trust Land Use Control Master Reference Report (“LUCMRR”) because certain areas within the Building 10 Area do not meet Presidio-specific residential or recreational cleanup levels for chemical concentrations in soil. The Presidio-specific residential and recreational cleanup levels are presented in the *Presidio-wide Cleanup Level Document* (EKI, 2002). Land use plans, which govern future use of the Presidio, designate the Building 10 Area for residential human land use (NPS, 1994; Presidio Trust, 2002; EKI, 2002). This Site-Specific Addendum for the Building 10 Area identifies the land use control (“LUC”) area, the chemicals of concern (“COCs”) that exceed residential cleanup levels, and the specific land use restrictions that apply.

2. BUILDINGS AND AREAS INCLUDED IN THE LAND USE CONTROL

The specific areas addressed in this addendum include portions of the sidewalk near the east and northeast corners of Building 10. Figure 1 shows the location of Building 10 and the LUC areas.

3. REMEDIATION SUMMARY AND REMAINING CHEMICALS OF CONCERN

This section describes the site history and remedial actions implemented at the Building 10 Area and identifies the remaining COCs.

3.1 Site History

Building 10 is one of 13 similar buildings (Buildings 4-16) in the Main Post area located along the parade ground in the central portion of the Presidio. The site is bounded by Mesa Street to the northwest and Funston Avenue to the southeast. The Army constructed Building 10 in the 1870s for use as officers’ quarters, which was its use until the 1990s.

Lead-based paint (“LBP”) appears to have historically been applied to the surface of Building 10. The U.S. EPA has identified LBP as a highly toxic metal, and the federal government has banned the use of LBP for painting homes since 1978 (U.S. EPA, 2005). According to the *Presidio-wide Cleanup Level Document* (EKI, 2002), the applicable cleanup level for lead in soil in residential land use areas is 400 mg/kg, with a maximum average concentration of less than 370 mg/kg.

In 1999, the Presidio Trust (“Trust”) retained Hygienetics Environmental Services to conduct lead soil sampling at the drip line (approximately 3 feet from the building) around selected buildings, including Building 10, and analyze the samples for total lead. Four of eight surface soil samples (0 to 3 inches below ground surface (“bgs”)) collected by Hygienetics exceeded the residential cleanup level of 400 mg/kg, and five of eight soil samples from 6 to 12 inches bgs exceeded the residential cleanup level (Hygienetics, 1999).

In June 2002, Engineering/Remediation Resource Group, Inc. (“ERRG”) excavated lead-impacted soil around Buildings 10. Ninyo & Moore collected confirmation samples, which were analyzed for total lead. ERRG conducted additional excavation in areas where the lead concentration in soil exceeded 400 mg/kg (Ninyo & Moore, 2002). Five rounds of excavation and sampling were conducted at Building 10 in June 2002.

3.2 Residual Chemicals Above Residential Cleanup Levels

According to the *Presidio-wide Cleanup Level Document* (EKI, 2002), the residential cleanup level for lead is 400 mg/kg. After five rounds of excavation and confirmation soil sampling performed by ERRG and Ninyo & Moore, all confirmation soil samples meet the lead cleanup level except for samples 10SS11(0.5), 10SS28(0.5), and DUP062702-1(0.5) (a duplicate of 10SS28(0.5)). The lead concentrations in these sidewall samples were 580 mg/kg, 560 mg/kg, and 570 mg/kg, respectively. As shown on Figure 1, a confirmation soil sample east of sample location 10SS11(0.5) near the south sidewalk was below the cleanup level. Also, a confirmation soil sample south of sample location 10SS28(0.5) and its duplicate were below the cleanup level. As the sidewalks were relatively new, the Trust assumes the elevated lead concentration may extend beneath the sidewalks, which was not removed as part of the remedial actions.

The full extent of any remaining the lead-impacted soil is not known, but on the south side of Building 10 the impact appears to be bounded by the excavation extent to the north, the drip line of the building to the west, the soil sample with results below the

cleanup level to the east, and the southern sidewalk edge. On the west side of Building 10, the impact appears to be bounded by the building stairs to the north, the excavation around the building to the east, the soil sample with results below the cleanup level to the south, and the sidewalk to the west. The sections of the sidewalk that cover what may be elevated concentrations of lead is the land use control described herein.

4. BUILDING 10 AREA SITE-SPECIFIC LAND USE RESTRICTIONS

Because residual lead concentrations in this limited area are greater than the residential cleanup level of 400 mg/kg general and site-specific land use restrictions apply to the Building 10 Area. The general restrictions are listed in Section 3.1 and 3.2 of the LUCMRR and are incorporated by reference. The coordinates for several angle points along the perimeter of the LUC area field located by the Trust are provided in Table 1. The information in Table 1, including the LUCs, will be included in the Trust's geographic information system ("GIS") for reference by potential site users. The site-specific land use restrictions for the Building 10 Area are described below.

- Soil disturbance activities must be performed according to a site-specific health and safety plan ("H&S Plan") that is consistent with applicable health and safety standards, such as 29 CFR 1910.120. Workers in the LUC area shall follow the H&S Plan, must have the appropriate level of health and safety training and must use the appropriate level of personal protective equipment, as specified in the relevant H&S Plan.
- Soil excavated from the LUC area shall be sampled and analyzed for lead before such soil may be reused at the Presidio or disposed appropriately offsite. Soil can be reused on-site only if lead concentrations in the excavated soil are less than the cleanup levels applicable to the receiving site (per the Cleanup Level Document) and hazardous waste criteria (California Code of Regulations, Title 22, Section 66261).
- The LUC area must remain covered with buildings, pavement, or another barrier in landscaped areas. The cover must be maintained for the entire LUC area unless, for a specific area, soil sampling shows that the representative concentrations of chemicals of concern do not exceed Presidio residential cleanup levels. Confirmation soil sampling to prove that the cover alternative is not warranted shall be no less than one sample every 25 linear feet (for sidewall sampling) and 625 square feet (for bottom sampling), with a minimum of 4 sidewall samples and one bottom sample.

5. REFERENCES

Department of the Interior, National Park Service, 1994. *Creating a Park for the 21st Century, from Military Post to National Park – Final General Management Plan Amendment. Presidio of San Francisco, Golden Gate National Recreation Area, California.* July 1994.

Erler & Kalinowski, Inc. (“EKI”), 2002. *Development of Presidio-wide Cleanup Levels for Soil, Sediment, Groundwater, and Surface Water, Presidio of San Francisco, California.* October 2002.

U.S. EPA Webpage, *Lead in Paint, Dust and Soil*, <http://www.epa.gov/lead/index.html>, document accessed 4/27/05.

Hygienetics Environmental Services, 1999. *Development Summary Report for Funston Avenue, Pre-Design Soil Sampling, The Presidio Trust, San Francisco, California.* August 1999.

Ninyo & Moore, 2002. *Lead-Based Paint in Soils Sampling and Remediation Summary Report, Buildings 9 and 10: Funston Avenue, The Presidio Trust, San Francisco, California.* November 2002.

Presidio Trust, 2002. *Presidio Trust Management Plan, Land Use Policies for Area B of the Presidio of San Francisco.* May 2002.

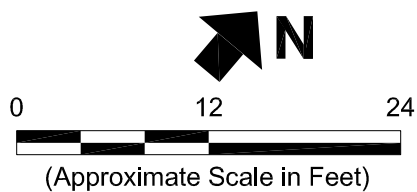
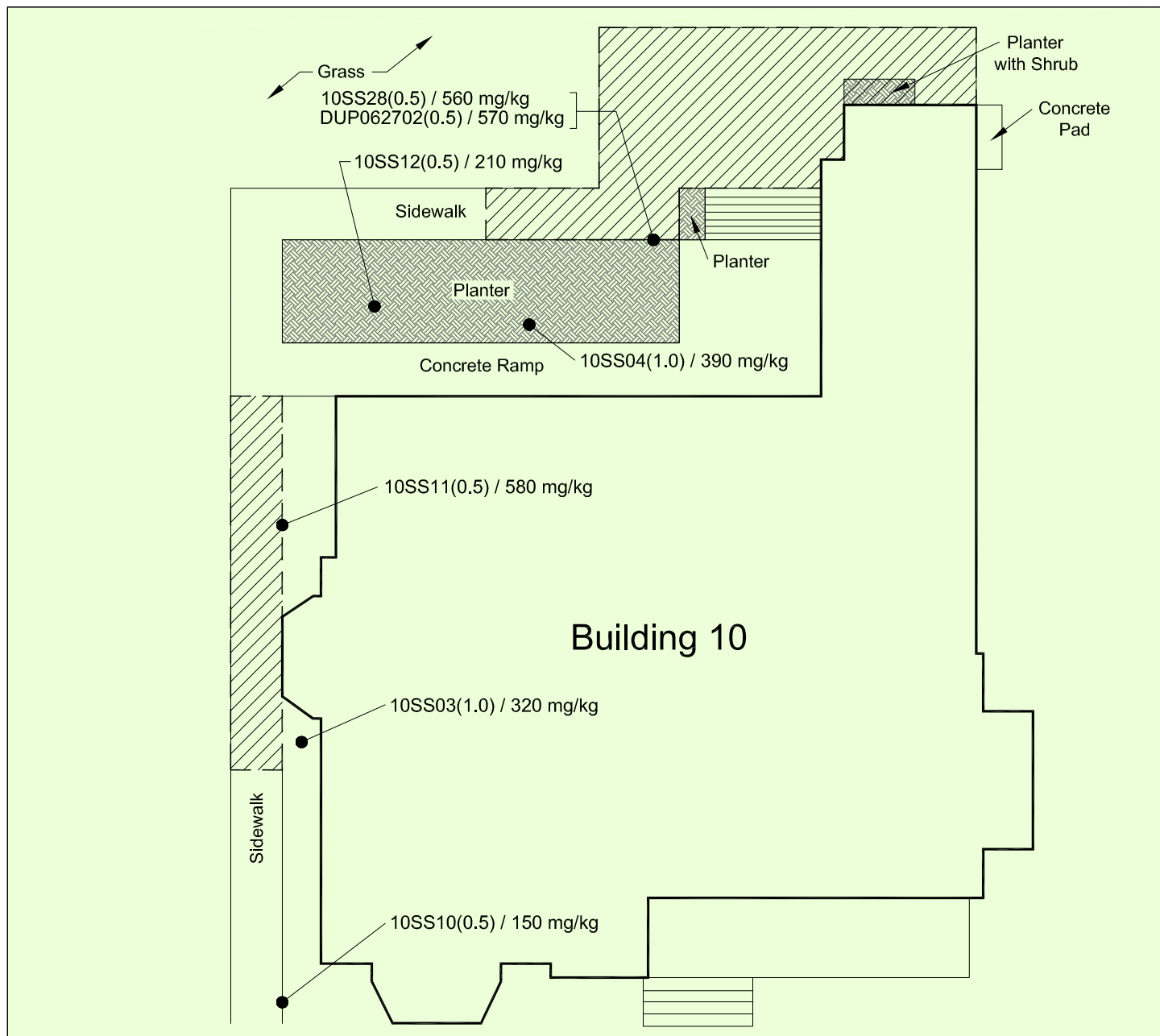
TABLE 1
BUILDING 10 AREA LAND USE CONTROLS

Presidio of San Francisco, California


Site Name	Land Use Controls	Regulatory Requirement for LUC?			LUCMRR Addendum Information		
			Coordinates of 4 Points (a)		Name	Date	File Name
Building 10 Area	(Valid Values) • Health and Safety Requirements • Soil Management Requirements • Surface Cover Restrictions	Yes Yes Yes	A		Bldg 10 Area LUC	8/11/2006	Bldg 10 LUC.pdf
			Northing				
			Easting				
			B				
			Northing				
			Easting				
			C				
			Northing				
			Easting				
			D				
			Northing				
			Easting				

Notes:

(a) Provide field surveyed coordinates in Northing East UTM Meter Zone 10 North coordinates.

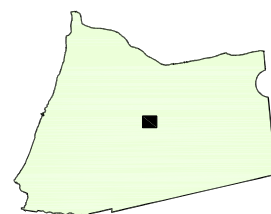


LEGEND

- 10SS11(0.5) / 580 mg/kg — Sample Location (Depth) / Lead Concentrations
-  — LBP LUC Area

Notes:

1. All locations are approximate.
2. Basemap was provided by Presidio Trust.
3. "LBP" = Lead Based Point
"LUC" = Land Use Control
4. Only selected sample locations are shown.



Key Map

**Erler &
Kalinowski, Inc.**

Building 10
Land Use Control Area



Presidio Trust
San Francisco, CA
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EKI A000003.14

Figure 1